

Title (en)  
TONE RECEIVER FOR A DIGITAL DATA TRANSMISSION SYSTEM

Publication  
**EP 0097753 B1 19861001 (FR)**

Application  
**EP 82430016 A 19820625**

Priority  
EP 82430016 A 19820625

Abstract (en)  
[origin: US4563681A] A device for detecting the presence of an alarm tone of a given frequency within a received signal carrying digital data in addition to said tone. The receiver comprises an analog-to-digital converter (42) the output of which is applied to a first recursive bandpass filter centered at the frequency of the alarm tone and the feedback loop of which includes a limiter. In addition, an input feedforward loop is provided for adding (at 58) the output signal from the converter (42), as multiplied by a coefficient gamma , to the output signal from the limiter. The output signal from the adder (58) is hard limited (at 44), then passed through a second bandpass filter. The energy of the signal obtained at the output of said second filter is then measured to provide indication of a tone's being received when said energy exceeds a predetermined threshold.

IPC 1-7  
**H04L 11/08**; **H04Q 1/448**

IPC 8 full level  
**E04H 9/00** (2006.01); **H04L 12/26** (2006.01); **H04L 27/00** (2006.01); **H04L 29/00** (2006.01); **H04Q 1/448** (2006.01)

CPC (source: EP US)  
**H04L 43/00** (2013.01 - EP US); **H04Q 1/4485** (2013.01 - EP US)

Citation (examination)  
COMMUTATION & ELECTRONIQUE, no. 59, octobre 1977, pages 99-115, Issy les Moulineaux (FR), H. CAMPAGNO et al.: "Système E10. L'équipement de tonalités et auxiliaires"

Designated contracting state (EPC)  
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**EP 0097753 A1 19840111**; **EP 0097753 B1 19861001**; AT E22637 T1 19861015; AU 1614683 A 19840105; AU 554265 B2 19860814; BR 8303260 A 19840207; CA 1209666 A 19860812; DE 3273552 D1 19861106; JP S598455 A 19840117; US 4563681 A 19860107

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